

6

Arizona
AASA

GRADE 5 MATH

PRACTICE TESTS

Complete Standards-Based Practice
— for Grade 5 Math Success —



$$A = \frac{1}{2}bh$$



$$5^2 = 25$$



**6 FULL-LENGTH
PRACTICE TESTS**

Realistic style questions



**STANDARDS-BASED
PRACTICE**

Covers all Grade 5
Math standards



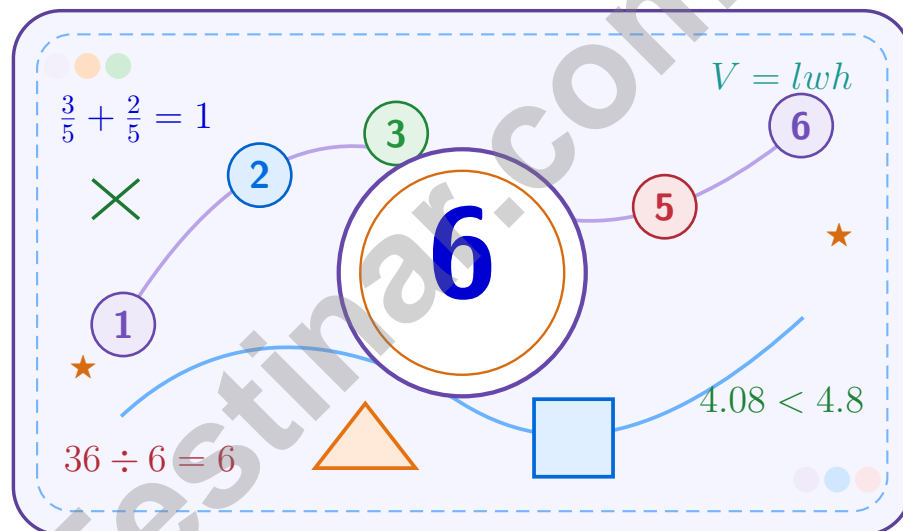
**BUILD CONFIDENCE.
IMPROVE SCORES.**

Target weak areas and
achieve success

★ STRONG PRACTICE. BRIGHT FUTURE. ★

6 Arizona AASA Grade 5 Math Practice Tests

A six-step confidence climb with clear review, smart strategy, and practice that gets stronger every round



Six full tests, a focused skill booster, and student-friendly support from start to finish for Grade 5 mathematicians who want to climb higher.

Jay Daie and Reza Nazari



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Welcome to the Confidence Climb

This book is here to help you practice with purpose and rise step by step

To the Grade 5 Mathematician

This practice book is a place to think, try, fix, and grow. You do not have to be perfect on the first question or the first test. What matters most is careful effort, clear work, and learning from each round of practice.

Use these six tests like stepping-stones. Take one test at a time, check your answers honestly, and notice which skills need more attention. Small improvements add up fast.

Try

Give each problem your best thinking.

Check

Study mistakes and learn what happened.

Rise

Bring that lesson into the next round.

A strong habit for every page: read carefully, estimate when it helps, show your steps, and keep going even when a question feels tricky. That is how steady math confidence is built.

How to Use This Book

A simple practice routine that turns six tests into steady growth

Step 1: Warm Up

Start with the quick review.
Spend a few minutes refreshing the ideas before you start a test.

Step 2: Take the Test

Take one full practice test.
Work in a quiet space and let accuracy matter more than speed.

Step 3: Study the Pattern

Check your work honestly.
Circle missed questions and notice patterns in the mistakes.

Step 4: Learn, Then Retry

Read the explanation and try again.
Learning happens after the test too. Fixing mistakes is one of the smartest parts of practice.

A Six-Week Climb Map

Week	Mission Focus
Week 1	Take Test 1 and review any place-value or operation slips.
Week 2	Take Test 2 and focus on showing neat, easy-to-read work.
Week 3	Take Test 3 and give extra time to fractions or decimals if needed.
Week 4	Take Test 4 and slow down on word problems and units.
Week 5	Take Test 5 and compare your score and habits with earlier rounds.
Week 6	Take Test 6 and finish with calm, careful, confident work that uses everything you practiced before.



Scan me

Test Overview

What this practice book helps students do

These practice tests are designed to help Grade 5 students get comfortable with the kind of thinking used on the Arizona AASA. The goal is bigger than only getting answers right. Students are practicing how to read closely, choose a strategy, solve carefully, and explain their work when needed.

Selected-Response Questions

Students solve the problem and choose the best answer. Estimating first and crossing out weak choices can save time and points.

Constructed-Response Questions

Students show their thinking, steps, models, or explanations. Even when unsure, writing what they know can help organize the problem.

Grade 5 Skills You Will Practice Often

- place value, comparing numbers, and rounding
- multi-digit addition, subtraction, multiplication, and division
- fractions, decimals, and mixed numbers
- perimeter, area, volume, and measurement conversions
- coordinate points, patterns, graphs, and tables
- geometry and multi-step word problems

What strong work looks like: the answer is correct, the steps are clear, the labels or units are included, and the final result makes sense.



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Grade 5 Mathematics

1

Questions: 40 Duration: No time limit

Calculator Policy: Calculators are not allowed



Grade 5 Mathematics Reference Materials

PERIMETER AND AREA

Perimeter of Rectangle $P = 2l + 2w$ or $P = 2(l + w)$

Area of Rectangle $A = l \times w$

Area of Triangle $A = \frac{1}{2} \times b \times h$

Volume of Rectangular Prism $V = l \times w \times h$

LENGTH

Customary

1 foot (ft) = 12 inches (in.)

1 yard (yd) = 3 feet (ft)

1 yard (yd) = 36 inches (in.)

Metric

1 meter (m) = 100 centimeters (cm)

1 centimeter (cm) = 10 millimeters (mm)

1 kilometer (km) = 1,000 meters (m)

CAPACITY

Customary

1 cup (c) = 8 fluid ounces (fl oz)

1 pint (pt) = 2 cups (c)

1 quart (qt) = 2 pints (pt)

1 gallon (gal) = 4 quarts (qt)

Metric

1 liter (L) = 1,000 milliliters (mL)

WEIGHT AND MASS

Customary

1 pound (lb) = 16 ounces (oz)

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TIME

1 minute (min) = 60 seconds (sec) 1 week = 7 days

1 hour (hr) = 60 minutes (min) 1 year = 12 months

1 day = 24 hours (hr) 1 year = 52 weeks



- 1) A composite museum stand is made from two non-overlapping rectangular prisms. Prism A is 7 inches long, 4 inches wide, and 6 inches tall. Prism B is 6 inches long, 4 inches wide, and 2 inches tall. What is the total volume?

- A. 168 cubic inches C. 48 cubic inches
 B. 244 cubic inches D. 216 cubic inches

- 2) The area of a square is found by multiplying side length by itself. If each side is $1\frac{1}{2}$ inches, what is the area?

	1	$\frac{1}{2}$
1	1	$\frac{1}{2}$
$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{4}$

Area: $1\frac{1}{2}$ in \times $1\frac{1}{2}$ in gives square inches

- A. $3\frac{1}{4}$ square inches C. $2\frac{1}{4}$ square inches
 B. 3 square inches D. $1\frac{1}{2}$ square inches
- 3) A rectangular prism has a base area of 24 square inches and a height of 3 inches. What is its volume?
- A. 27 cubic inches C. 72 cubic inches
 B. 48 cubic inches D. 96 cubic inches
- 4) What is the volume of a rectangular box with dimensions 8 inches, 6 inches, and 4 inches?
- A. 288 cubic inches C. 240 cubic inches
 B. 216 cubic inches D. 192 cubic inches



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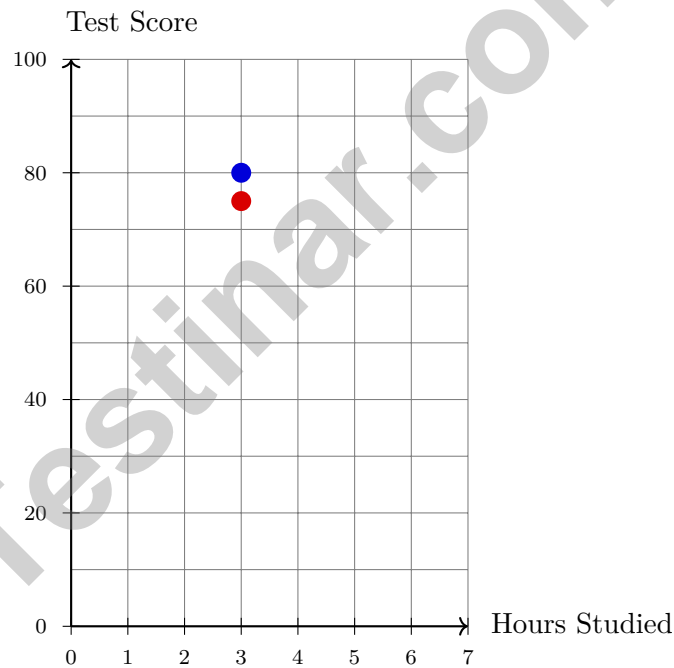


1) Complete the pattern:

Expression	Value
$3,500 \div 10$	350
$3,500 \div 100$	35
$3,500 \div 1,000$?

- A. 35,000 C. 350
 B. 0.35 D. 3.5

2) A survey plots the relationship between hours of study and test scores. Two students took 3 hours to study. One scored 75, the other scored 80. What are their coordinates?



- A. (3, 75) and (3, 80) C. (3, 155)
 B. (75, 3) and (80, 3) D. (75, 80)



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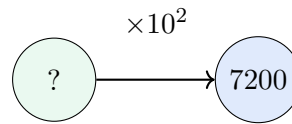
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- 1) Emma multiplies a number by 10^2 and gets 7200. What was the original number?



- A. 720 C. 7200
 B. 72000 D. 72
- 2) A recipe calls for $\frac{2}{3}$ cup of sugar and $\frac{1}{4}$ cup of butter. How many cups of these two ingredients are needed?
- A. $\frac{3}{7}$ cup C. $\frac{11}{12}$ cup
 B. $\frac{8}{12}$ cup D. $\frac{9}{12}$ cup
- 3) Rewrite $\frac{2}{5}$ and $\frac{3}{10}$ using the least common denominator.
- A. $\frac{8}{20}$ and $\frac{6}{20}$ C. $\frac{20}{50}$ and $\frac{15}{50}$
 B. $\frac{6}{15}$ and $\frac{9}{15}$ D. $\frac{4}{10}$ and $\frac{3}{10}$



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1) A student says: "Since a rectangle is a parallelogram, and a parallelogram is a quadrilateral, then a parallelogram must be a rectangle." Is this reasoning CORRECT?

- A. Yes, because hierarchy is bidirectional. C. Yes, because rectangles are the largest group.
- B. No, because being in a category does NOT mean all items in that category share the same properties. D. No, because quadrilaterals have nothing to do with rectangles.

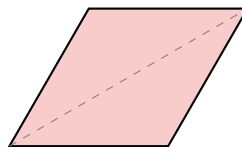
2) A container holds $\frac{8}{9}$ gallon of water. You use $\frac{1}{4}$ of the water. How much water do you use? Give the answer in simplest form.

- A. $\frac{8}{13}$ gallon C. $\frac{7}{13}$ gallon
- B. $\frac{1}{2}$ gallon D. $\frac{2}{9}$ gallon

3) Identify the correct rounding statement:

- A. 6.234 rounded to the nearest tenth is 6.24 C. 6.234 rounded to the nearest whole number is 7
- B. 6.234 rounded to the nearest tenth is 6.2 D. 6.234 rounded to the nearest hundredth is 6.24

4) This figure has all four sides equal and is drawn like a diamond. What is the most specific name for this quadrilateral?



all sides equal

- A. Rectangle C. Trapezoid
- B. Rhombus D. Kite



Practice Test Answer Keys

How to use this section:

1. check your answer
2. circle missed questions
3. rework them before reading the explanation

Good correction habits build strong scores.

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Practice Test Answers and Explanations

Practice Test 1 Answers and Explanations

- 1) **Choice D is correct.** (5.MD.C.3) Find each part first: Prism A is $7 \times 4 \times 6 = 168$ cubic inches, and Prism B is $6 \times 4 \times 2 = 48$ cubic inches. Because the parts do not overlap, add them: $168 + 48 = 216$ cubic inches.
- 2) **Choice C is correct.** (5.NF.B.4) $1\frac{1}{2} \times 1\frac{1}{2} = \frac{3}{2} \times \frac{3}{2} = \frac{9}{4} = 2\frac{1}{4}$ square inches.
- 3) **Choice C is correct.** (5.MD.C.3) The base area is 24 square inches and the height is 3 inches, so the prism has 3 layers of 24 cubic inches. $24 \times 3 = 72$ cubic inches.
- 4) **Choice D is correct.** (5.MD.C.4) Volume = $8 \times 6 \times 4 = 192$ cubic inches.
- 5) **Choice B is correct.** (5.NBT.A.2) She found the product correctly, but counted the zeros incorrectly. The number 230 ends with exactly one zero.
- 6) **Choice C is correct.** (5.NF.B.7) Each pound makes 4 quarter-pound pizzas. $10 \div \frac{1}{4} = 10 \times 4 = 40$ mini pizzas.
- 7) **Choice A is correct.** (5.OA.A.2) Yes. The parentheses make one sum, $(15 + 9)$, and dividing that sum by 3 means finding one third of it.
- 8) **Choice B is correct.** (5.MD.C.5) The base area is $20 \times 4 = 80$ square centimeters. Since $400 \div 80 = 5$, the height is 5 cm.
- 9) **Choice D is correct.** (5.MD.B.2) The pieces longer than 1 inch are two pieces of $1\frac{1}{4}$ inches and one piece of $1\frac{1}{2}$ inches. Their total is $1\frac{1}{4} + 1\frac{1}{4} + 1\frac{1}{2} = 4$ inches.
- 10) **Choice D is correct.** (5.NBT.B.6) In division, the quotient is the number of complete groups, and the remainder is what is left after making equal groups. So $847 \div 29 = 29$ R6 means 29 complete groups of 29 with 6 items remaining.
- 11) **Choice A is correct.** (5.NBT.B.7) On a 10×10 hundredths grid, shading 7 columns (width) and 8 rows (height) gives $7 \times 8 = 56$ shaded squares, representing 0.56 or 56%.
- 12) **Choice B is correct.** (5.MD.C.4) Volume = base area \times height = $(8 \times 7) \times 6$.
- 13) **The correct answer is 0.321.** (5.NBT.A.2) Move the decimal point two places left: $32.1 \rightarrow 0.321$.
- 14) **Choice C is correct.** (5.MD.B.2) Highest score is 6, lowest is 2. Difference: $6 - 2 = 4$.
- 15) **Choice D is correct.** (5.NF.B.7) Start with one unit fraction, $\frac{1}{4}$, and share it into 3 equal parts. Each part is $\frac{1}{4} \div 3 = \frac{1}{12}$ of the whole.
- 16) **Choice D is correct.** (5.MD.C.4) $V = B \times h = 15 \times 10 = 150$ cm³.
- 17) **Choice C is correct.** (5.G.A.2) Since 0 is the first term, the first five A-values are 0, 1, 2, 3, 4 and the first five B-values are 0, 3, 6, 9, 12. The 5th ordered pair is (4, 12).
- 18) **Choices A, B are correct.** (5.MD.A.1) A is true: $2.5 \times 100 = 250$ cm. B is true: $3 \times 1,000 = 3,000$ g. C is false: 500 mL = 0.5 L (not 5 L). D is false: 4 cm = 0.04 m (not 40 m).
- 19) **Choice D is correct.** (5.OA.B.3) For each position, Pattern B equals 2 times the value in Pattern A. For example, when Pattern A is 3, Pattern B is 6.
- 20) **Choice B is correct.** (5.NF.B.5) Since $\frac{1}{3} < 1$, multiplying 9 by $\frac{1}{3}$ will give a result smaller than 9. No computation needed!
- 21) **Choice D is correct.** (5.OA.B.3) Rule: double and add 1. $23 \times 2 + 1 = 47$.
- 22) **Choice C is correct.** (5.MD.C.4) Original: $8 \times 2 \times 2 = 32$ cubes. Double the length to 16: $16 \times 2 \times 2 = 64$ unit cubes.
- 23) **Choice C is correct.** (5.NBT.B.7) Add dollars and cents by place value: $3.68 + 2.47 = 6.15$. The total cost is \$6.15.
- 24) **Choice C is correct.** (5.NF.B.7) Dividing by $\frac{1}{3}$ asks how many one-third pieces are in 5 wholes. Each whole has 3 thirds, so $5 \div \frac{1}{3} = 5 \times 3 = 15$.
- 25) **Choice B is correct.** (5.OA.A.1) Use the diagram from left to right. The innermost group gives 6, the middle group gives 18, and the outermost level is $\{18 + 2\} = 20$.
- 26) **The correct answer is 60,000.** (5.NBT.A.2) Multiplying by a power of 10 shifts the value to a larger place. $6 \times 10,000 = 60,000$. This confirms the answer.
- 27) **The correct answer is $2\frac{2}{3}$.** (5.NF.A.1) Rewrite $5\frac{1}{3} = 4\frac{4}{3}$ (borrow). Subtract: $(4 - 2) + (\frac{4}{3} - \frac{2}{3}) = 2\frac{2}{3}$.
- 28) **Choice B is correct.** (5.NBT.B.5) Multiply: $121 \times 5 = (100 \times 5) + (20 \times 5) + (1 \times 5) = 500 + 100 + 5 = 605$.



Hey there, Mathematical Inventor!

★ Brilliant innovation session! You've engineered solutions to six complete practice tests, designing creative approaches and building mathematical machines in your mind like a master inventor! Every problem you solved required you to design a solution strategy, test different approaches, and refine your methods. That's exactly what inventors do, and you've become exceptionally skilled at it! ★

◇ **Here's what successful inventors understand:** the first prototype rarely works perfectly. Great inventors test, adjust, redesign, and improve until they create something remarkable. You've practiced that exact process through these six tests! Each mistake taught you to refine your approach, and now you have a toolbox full of reliable mathematical inventions ready to use! ◇

Inventor's Workshop: Your Creations

- **Problem-Solving Blueprints:** You've designed reliable methods for every problem type!
- **Strategic Prototypes:** You test multiple approaches to find the most efficient solution!
- **Quality Testing:** You verify your answers to ensure accuracy before submitting!
- **Continuous Improvement:** You learn from feedback and consistently enhance your skills!

Remember this inventor's principle: preparation is the foundation of innovation! Six complete practice tests represent substantial preparation. You've tested your mathematical machines repeatedly, and they work beautifully. Test day is your opportunity to demonstrate your inventions to the world. Trust your engineering!

Want to patent a particularly clever solution method? Share your mathematical inventions at reza@testinar.com. I celebrate innovative thinking!

Reza Nazari & Jay Daie

Your Math Coaches (Mistakes Help You Learn)

6 FULL-LENGTH TESTS. ENDLESS POTENTIAL.

PRACTICE TODAY. SUCCEED TOMORROW.

Give your child the tools they need to build strong math skills and test-taking confidence! This book includes **6 full-length practice tests** along with standards-based practice, mixed review, word problems, and a complete answer key.

★★★
PRACTICE
WITH PURPOSE.
ACHIEVE WITH
CONFIDENCE.

WHAT'S INSIDE:



6 FULL-LENGTH PRACTICE TESTS

Realistic tests designed to reflect the actual test format and help build confidence.



STANDARDS-BASED PRACTICE

Covers all essential Grade 5 math standards with clear explanations and examples.



MIXED REVIEW

Reinforces key concepts with a variety of question types and review exercises.



WORD PROBLEMS

Build critical thinking and problem-solving skills with real-world scenarios.



COMPLETE ANSWER KEY

Step-by-step explanations for every question to support learning and growth.



IMPROVE. PRACTICE. ACHIEVE.

Consistent practice leads to stronger skills, higher scores, and greater success.



WHY PRACTICE MAKES A DIFFERENCE



BUILD CONFIDENCE

Feel prepared and ready for any challenge.



IMPROVE ACCURACY

Strengthen skills and reduce careless mistakes.



THINK STRATEGICALLY

Develop problem-solving skills and deepen understanding.



MANAGE TIME

Practice under timed conditions to build stamina.



STAY MOTIVATED

Track progress and celebrate every win.



ACHIEVE SUCCESS

Reach goals and unlock your full potential!



Visit testinar.com/math5

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Smart Practice. Stronger Results.